1	PETITION to the Commissioner begins on page 3 of this paper.
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3	AMENDMENTS to the Specification, including Background, Summary,
4	Drawing Description, and Description of the Preferred Embodiments
5	begin on page 10 of this paper.
6	
7	AMENDMENTS to the Claims begin on page 13 of this paper.
8	
9	REMARKS begin on page 18 of this paper.
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<u>Petition to the Commissioner</u>

Applicant hereby petitions the Commissioner of Patents, under 37 CFR 1.181 et seq., or any other CFR section deemed appropriate by the Commissioner, and authorizes payment of fees under 37 CFR 1.17 et seq., or any other CFR section deemed appropriate, with authorization to charge Account No. 010428 for any fees deemed due in connection with the filing of this document in the U.S. Patent and Trademark Office, to reassign the present application to an examiner and a supervisor possessing at minimum level: 1) a basic understanding of electronic communications communicating informational content with various forms for synchronous and asynchronous signaling; 2) a basic understanding of electronic communications art parlance; and 3) an ability to properly reject claims based upon teachings and suggestions of cited references.

NOW COMES, the applicant, with kind due respect, requesting a change in the examiner as there appears recurring unsupported rejections based upon an apparent inability to understand basic electronic communications communicating informational content with various forms for synchronous and asynchronous signaling, to understand basic electronic communications art parlance, and to properly reject claims based upon teachings and suggestions of cited references rather than unsupported and forbidden hindsight reconstruction as the basis of claim rejection. This case was filed on May 23, 2000, and after six years of applicant taking the time to instruct the examiner as to certain aspects of electronic communications, electronic parlance, and forbidden hindsight

reconstruction, the examiner persists in his rejections and failures to appropriately amend the specification, at unnecessary and large waste of governmental and applicant resources. After six years, of fruitless instruction to the examiner, enough is enough. It was hoped that the RCE would have provided a fresh examination.

A very brief history and statement of this case seems appropriate at this juncture. The invention uses a sigma delta modulator to generate a binary signal having pulse width indicating an analog value input. This binary signal is transmitted as an asynchronous signal in binary form still having a pulse width representing an analog value of the analog input signal where the sigma delta modulator drives an optical laser transmitter transmitting the same pulse width representing a signal to an optical laser receiver having a filter for determining the pulse width, and hence, the analog value. As such, the transmitted signal is asynchronous, in that, it does not use error correcting codes, bit transitions, or framing data bits during optical transmission as an advancement in the art. The background of specifications clearly sets forth these synchronization problems that the present invention solves.

The terms synchronous and asynchronous are well understood by anyone, that is, anyone skilled in the art. Even college students in their first introductory course in electronic communications understand the difference between synchronous and asynchronous communications, yet, the examiner seems to lack this basic understanding. Claims should be couched in positive language, that

is, stated as to what the invention is, and not what the invention is not. The original claims did not use the term asynchronous, a lack of synchronism, which feature solves the problems as stated in the background. The asynchronous communication aspect is inherent in the functional combination of the original claimed inventions.

After the examiner rejected the claims as to obviousness that includes both a consideration of the problem solved as well as the solution thereto, the specification and the claims were amended to specifically require the examiner to consider the problem solved. The examiner did not take this helpful instructive amendment as intended, but rather, made what is believed to be rather dubious assertions that the specification does not teach asynchronous communications, yet, the specification clearly states that the communication signals are transmitted without frames that is one of many kinds of synchronous signaling. The original claims did not, properly, use such language as "without framing bits". To help the examiner more fully understand the invention, as understanding seemed lacking, the specification was amended to specifically include the terms synchronous and asynchronous. The claims were amended, without an apparent need to do so, accepting of course, as an aid to the examiner, to more fully understand the invention to include "without framing" in positive language, that is with the term " frame asynchronous", so as to focus attention as to the novel aspects. Notwithstanding this painful instruction and adding unnecessary claim limitations, the examiner persisted in rejecting the claims under 35 USC 112, apparently, failing to exhibit a minimum understanding of the art and its parlance.

1   What more could one do to aid the examiner, to assist the

2   examiner in understanding a basic concept of electronic

3   communications?

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5   With respect to claim 1, the base independent claim, as well

6   as claim 11, the second independent claim, the examiner rejects

7   under 35 USC 103 as unpatentable as obvious. The rejections are

8   primarily based on two isolated cited references, Beauducel in view

9   of Palmer, having no relevant connection between them, other than,

10   both use a sigma delta modulator for modulation and that, Beauducel

11   teaches electrical and optical communications and Palmer

12   specifically teaches optical laser transmission. Both of these two

13   references teach synchronous communications. How possibly could the

14   cited references, using or suggesting synchronous optical

15   communications, be used to reject claims properly based upon

16   asynchronous communications? Actually, where all of the cited

17   references teach away from the present invention, it is strong

18   evidence of nonobviousness.

19

20   The combination of these two references, teaching or

21   suggesting the use of a sigma delta modulator for synchronous

22   communication to arrive at the claim invention is forbidden

23   hindsight reconstruction. The sigma delta modulator in the present

24   application uses a local clock to modulate the pulse width with a

25   time duration length, that is, the horizontal pulse width

26   indicating an analog input value, the sought after information to

27   be asynchronously communicated. The cited references use a local

28   clock signal to modulate vertically the communication signal having

1 bit transitions, and hence, are synchronous communications. There

2 is a clear difference. Additionally, there are no practical

3 combinations of these cited references to arrive at the claimed

4 combination, one of the hallmarks of forbidden hindsight

5 reconstruction.

6

7 The examiner cites Beauducel Col 3 lines 56-62 as teaching

8 "the modulated binary laser signal having a pulse width having a

9 duration representative of the analog input signal (inherent in

10 modulation)". Yet, Col 3 lines 45-62 explicitly teach the

11 "synchronization element 5" that is local clock for providing

12 transitions, and teach "the coding circuit 6" that is a multi level

13 code for providing a coded signal. This language clearly teaches

14 synchronism and coding so as to provide a binary signal having

15 transitions. The synchronicity and the coding are the exact types

16 of problems that the present invention solves. Claim 1 limitation

17 provides "a pulse width having a duration representative of the

18 analog input signal" When the analog signal is "coded", it loses

19 its pulse width that would represent the analog value during

20 transmission. Hence, the communicated signal is neither binary,

21 synchronous, nor having a pulse width representing analog value.

22

23 Palmer is cited for the proposition that sigma delta

24 modulators have been used with lasers. Agreed, but, so what? The

25 novel aspect of the invention is directed to the particularly

26 claimed type of laser modulation over the optical communication

27 medium, and that is, "a pulse width having a duration

28 representative of the analog input signal". Palmer teaches a

-7-

coherent laser transmission communication system, inherently having, the required and necessary, optical modulation using "an embedded clock" at Col 2 lines 5-12. What the examiner is attempting to do, is to take, a precursor condition, that is, transforming an analog signal into one represented by a pulse width, admitted prior art, and a constituent aspect of the synchronized signal of Beauducel, while ignoring the synchronization aspect of Beauducel and Palmer for purposes of transmission, and then jumps to the claimed invention without any suggestion to do so, and contrary to the explicit teachings of Beauducel and Palmer, smacking of forbidden hindsight reconstruction.

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The examiner also relies upon the phrase "the data stream is self synchronizing", taken is isolation, unfairly so. What the examiner fails to take into account, is that a digital filter on the receiver side effectively filters the transmitted signal so as to determine the pulse width and hence to reconstruct the analog value, and in this sense, the "data stream is self synchronizing". Applicant never stated that the binary signal had bit transitions within the pulse with, used codes, or frames, or any other signaling method that would render the communication signal as being synchronously communicated. The examiner's reference to "the data stream" in the context of an over all system explanation to the particular binary signal having "a pulse width" just smacks of grasping for any justification to reject the claims, by applying applicant's words to different features and out of context, and hence, shows a demonstrable bias of being unfair and impartial to the present application.

With kind due respects, applicant request that another examiner be assigned to the present application, which examiner should have a basic understanding of electronic communications and parlance and who can read cited references for they reasonably teach.

Respectfully Submitted

Derrick Michael Reid

Derrick Michael Reid

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